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ABSTRACT

This review of the literature on anxiety, stress, and their relationship to the concept of burnout among classroom teachers considers six major areas: (1) definitions of anxiety, stress, and burnout; (2) the major findings of research which demonstrate the prevalence of anxiety, stress, and burnout in classroom teachers; (3) the major findings of research which designate the symptoms of existing anxiety, stress, and burnout in classroom teachers; (4) the major findings of research which delineate the sources of anxiety, stress, and burnout in classroom teachers; (5) suggestions for stress management interventions which apply to school settings; and (6) a summary. Citations are taken from current books, educational journals, bulletins, dissertation abstracts international, magazines, and ERIC documents. A comprehensive list of references is included. (JD)

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of Anxiety, Stress, and Burnout Among Classroom Teachers,
and Implications for Interventions

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An Investigation of the Prevalence, Symptoms, and Sources
of Anxiety, Stress, and Burnout Among Classroom Teachers,
and Implications for Interventions

The subjects of anxiety and stress, and their relationship to the concept of burnout, are of growing concern and interest to professionals in the field of education and to individuals in the general public. Widespread concern with the effects of anxiety and stress upon those who work in the teaching profession is demonstrated by the frequency with which these topics are addressed in current books, educational journals, magazines, and newspapers (Sparks, 1981). This review of the literature will consider six major areas: (a) definitions of anxiety, stress, and burnout; (b) the major findings of research which demonstrate the prevalence of anxiety, stress, and burnout in classroom teachers; (c) the major findings of research which designate the symptoms of existing anxiety, stress, and burnout in classroom teachers; (d) the major findings of research which delineate the sources of anxiety, stress, and burnout in classroom teachers; (e) suggestions for stress management interventions which apply to school settings; and (f) a summary.

Definitions

At this point, several important terminological distinctions, that will facilitate further discussion and understanding of the phenomena of anxiety, stress, and professional burnout, seem warranted. Lazarus (1966) stated:

In spite of the importance of stress, there is little coherence in the theory and research that annually emanate from technical books and journals dealing with it. There are no

agreed-upon conventions concerning terminology. For example, some writers employ the term "stress" where others use the term "anxiety," "frustration," "conflict," or "defense" to refer to exactly the same phenomena. (p. 2)

The words stress, threat, and anxiety are often used interchangeably by those who research these phenomena (Speilberger, Lushene, & McAdoo, 1977). Schwab (1983) reported that many articles on teacher burnout have avoided the issue of clearly defining the term or have provided sketchy definitions based on limited case studies or personal experience.

Anxiety

Anxiety can be operationally defined in many ways. It may arise as a reaction to anything that threatens one's existence as a separate self or that jeopardizes the attitudes one has concerning oneself and one's relations with others. It occurs as a response to a threat and as a way of alerting a person to avoid anything that might threaten an irrational attitude or life-style he/she has adopted in trying to cope with the problems of life (Jersild, 1955). Coates and Thoresen (1976) found that stress, tension, and anxiety among teachers represent one area of personality that has remained all but ignored from a cause-and-effect perspective. They define the term anxiety as simply a summary description of a variety of overt and covert actions. Implied in their definition of anxiety are stress or tension responses experienced directly by the person cognitively, motorically, or physiologically in response to specific life situations. Their review of research on teacher anxiety warranted the following conclusions and recommendations:

1. Anxiety appears to occur with considerable frequency and is an important concern among beginning and experienced teachers.
2. Teacher anxiety appears to be associated with a variety of personal, social, and physical conditions (ranging from concern with one's adequacy as a teacher and discipline problems to the availability of materials and facilities).
3. The specific effects of teacher anxiety on other teacher behaviors and on student actions, although widely studied and apparently important, remain unknown, largely because of measuring operations employed.
4. Systematic desensitization and instruction in teaching techniques may reduce teacher anxiety. (pp. 175-176)

Speilberger, Lushene, and McAdoo (1977) defined the term state anxiety (A state) as the "emotional reaction or response that is evoked in a person who perceives a particular situation as personally dangerous or frightening for him, irrespective of the presence or absence of a real (objective) danger" (p. 242). It may be conceptualized as a transitory emotional state or condition of the human organism that varies in intensity and fluctuates over time. They agreed that if an individual appraises a situation as threatening, he/she will experience an immediate increase in the intensity of an unpleasant emotional state which is characterized by consciously experienced feelings of tension, apprehension, and heightened autonomic nervous system activity. The amount and duration of this anxiety reaction will be determined by the amount of threat perceived by the individual and by the persistence of his/her appraisal of the situation as threatening or dangerous.

Trait anxiety (A trait), as defined by Speilberger, Lushene, and McAdoo (1977), refers to "relatively stable individual differences in anxiety proneness—that is, to

differences in the disposition to perceive a wide range of stimulus situations as dangerous or threatening, and in the tendency to respond to such threats with A-state reactions" (p. 249). A trait reflects individual differences in the frequency and intensity with which A states have been manifested in the past and in the probability that such states will be experienced in the future. Persons with high A trait tend to perceive a larger number of situations as dangerous or threatening than do persons who are low in A trait, and they tend to respond to situations that are threatening with A-state elevations which are of greater intensity.

Woolfolk and Richardson (1978) concluded that anxiety is a composite of feeling and physiology. Subjectively, anxiety as a feeling state is characterized by varying degrees of feelings of apprehension, dread, or nervousness. On the behavioral side, it is marked by heightened autonomic nervous system activity, including such symptoms as heart palpitation, sweating, disturbances in breathing, and muscle tension. DeRosis (1979) stated the followings:

Anxiety is a feeling of dread, a nameless fear that distracts the minds and hearts of people of all ages. It is a constellation of physical symptoms, of uncomfortable, troubled feelings and thoughts, that may be relatively mild or reach the point of utter panic. It is a reaction to frustration and to unresolved anger which seems to burn a hole into your very being. It is a response to unbearable stress. It represents an inability to maintain the neurobiochemical balance essential to a sense of well-being. It is a beacon light signaling the existence of unconscious emotional conflict. (p. 10)

Miller (1979) concluded that stress begins with anxiety, which is a disturbance arising from some imbalance within the

individual. When the resulting tension reaches a degree of intensity that has an adverse effect upon the body, one suffers distress.

Stress

Many authors and researchers have offered definitions of stress. Selye (1974) defined stress as "the non-specific response of the body to any demand made upon it" (p. 14). An individual subjectively interprets a situation or event and subsequently reacts to it in a specific way. The response is highly individualized and may vary from person to person. It is evident from this definition that stress cannot be avoided. Activity associated with stress may be pleasant (eustress) or unpleasant (distress). A situation need not be damaging to be stressful. Selye (1974) identified a response process which he termed "general adaptation syndrome." The initial response to any kind of stress is alarm, followed by a stage of resistance, which is a chemical rallying of the body's defenses allowing for a fight or flight reaction. If the threat is intense or goes on for a long period of time, individual resources are exhausted and the body can no longer adapt to the demand. This can lead to a physical breakdown and eventual death of the organism.

Belcastro and Gold (1983) noted that Selye's description does not represent a consensus among researchers. There are other widely accepted views that should be considered. Some view stress as the stimuli or external force acting on an individual, while others interpret stress in multivariable environmental terms. It is the latter view which encompasses a

range of interdependent factors that include not only stimuli and response, but also the intervening psychological and experimental factors that determine stimulus-response relationships.

Stress is inherently neither good nor bad; it depends upon the consequences of an individual's reactions to it (Davis, 1977; Freeman, 1979). The average person is capable of dealing with occasional crises; it is repeated crises that can begin to affect an individual adversely. Austin (1981) concluded that each person's optimum level of stress is developed according to inherited traits and life experiences. Individuals need to be aware of this optimum level and remain within its boundaries. When one receives too much or too little stimulation, potential remains untapped, and problems with self-esteem may occur.

French and Caplan (1972) indicated that stress is directly related to an individual's ability to cope with environmental conditions, particularly with conditions in the work environment. Their theory of stress is directly related to the fit between a person and his/her environment. Stress occurs when there is a lack of fit between environmental demands and an individual's capacities to respond to those demands (Milstein, Golaszewski, & Duquette, 1984). According to Kyriacou and Sutcliffe (1978), teacher stress is a response syndrome of negative emotions usually accompanied by potentially pathogenic physiological changes resulting from aspects of the teacher's job. It is mediated by the perception that the demands made upon the teacher constitute a threat to his/her self-esteem or

well-being and by the coping mechanisms which are activated to reduce the perceived threat.

Fimian (cited in Swick & Hanley, 1985) explained stress as a "hypothetical construct that represents an equilibrium state that exists between the individual responding to environmental demands and the actual environment" (p. 6). This disequilibrium might have actual causes, perceived causes, or both. He stated further that stress exists not only in the work environment, but also in messages which individuals send themselves about environmental events.

Lemley (1981) identified stress as one of the critical problems of this decade. He felt that teachers perceive that they have little control over the school environment, and that this lack of control acts as a major stressor. It is essential that the causes of personal and professional stress be identified so that problems can be isolated and resolved within the workplace (Wangberg, 1982).

Dunham (1984), in his interactionist model for stress reduction among teachers, defined stress as a "process of behavioural, emotional, mental and physical reactions caused by prolonged, increasing or new pressures which are significantly greater than coping resources" (p. 3). Stress can also be explained as a person's affective responses to a specific situation (Swick & Hanley, 1985). They viewed teacher stress as "the occurrence of perceived negative situations that result in adverse teacher responses or behaviors" (p. 6). An event that may be stress-producing for one individual may appear as a

challenge to another or may go unnoticed as a normally occurring situation.

After analyzing stress research, Pelletier (1979) concluded that the effects of stress are dependent upon the degree of individual reactivity to a stressor, the duration of reactivity over time, the background of long-term physiological arousal, and whether the pituitary or adrenomedullary system is more activated by a stressor. In summary, research indicates that the susceptibility to a stress reaction is holistic. It is a function of the frequency and number of stressors, the degree of perceived threat of a stress event, coping skills, inherent biological reactivity, diet, exercise, stage of life, and social support systems (Hembling & Gilliland, 1981).

Burnout

A major malady has afflicted the teaching profession and threatens to reach epidemic proportions. This malady is teacher burnout, a condition that results from stress, tension, and anxiety in its victims (McGuire, 1979). In 1979, Scriven noted that educational literature was inundated with research pertinent to the topic of burnout. Sakharov and Farber (1983) determined that burnout has most often been discussed and written about in relation to teaching and teachers.

Whether stress is defined to mean a reaction, force, or combination of environmental factors, burnout is more specifically interpreted to mean a manifestation of stress. The terms stress and burnout often are used interchangeably, although stress should be seen as a more general term and

burnout as evidence of work-related stress (Belcastro & Gold, 1983).

Maslach (1978), the first to compile empirical data on burnout, described it as a dehumanizing process, emphasizing the loss of concern and empathy in previously caring workers. The term concerns the feelings of people in the helping professions who find that the stress involved in their work environment has altered their original feelings about themselves and their work. The resulting cynicism often causes the worker to approach clients in derogatory ways. Teachers experiencing these feelings of burnout can have a detrimental effect on their colleagues, their students, and the reputation of the school in which they are employed (Schwab, 1983).

Maslach (1978) determined that burnout can be measured on three dimensions including emotional exhaustion, depersonalization or psychological distancing toward service recipients, and personal accomplishment. People who experience greater emotional exhaustion and depersonalization and less sense of accomplishment in their jobs tend to be more burned out than those whose experiences are more positive (Zabel & Zabel, 1983).

Spaniol (1979) found that burnout is characterized by feeling locked into a job routine. He identified three levels of burnout. Mild burnout involves short-lived bouts of irritability, fatigue, worry, and frustration. Moderate burnout involves the same symptoms but lasts for at least two weeks. Severe burnout entails physical ailments such as ulcers, chronic

back pain, and migraine headaches. It is not unusual for teachers to experience occasional mild-to-moderate feelings of burnout. It is when these feelings persist and manifest themselves through chronic physical and emotional illness that burnout becomes a serious problem (Iwanicki, 1983).

Freudenberger (1980) suggested that burnout is the result of the differences between expectations and observations in the work setting. Idealistic teachers become frustrated; these feelings of frustration lead to demoralization, emotional exhaustion, apathy, or cynicism (Riccio, 1983).

Pines, Aronson, and Kafry (1981) referred to burnout as a state of mind that afflicts people who work with other people and who give much more than they receive from colleagues, friends, supervisors, and clients. Veninga and Spradley (1981) defined burnout as a debilitating psychological condition brought about by unrelieved work stress. This stress results in depleted energy reserves, lowered resistance to illness, increased dissatisfaction and pessimism, and increased absenteeism and inefficiency at work. Austin (1981) stated that burnout is chronic, habitual stress which accumulates without compensatory relaxation. Included in his attempts to examine stress, career burnout, and midlife professional crises as they affect modern professionals, Cardinell (1981) noted that the term burnout has been applied to the mid-career deterioration of on-job performance, personality changes, or the abandonment of the profession.

Because burnout occurs whenever a person with inadequate stress-management and need-gratifying skills must work in a stressful and need-frustrating environment, it can be a very costly phenomenon not only for the individual, but also for the organization which employs him/her (Melendez & deGuzman, 1983). Dixon, Shaw, and Bensky (1980) used the term burnout to mean not only the rate of staff turnover, but the number of persons who remain in their positions, while suffering from frustration and fatigue. They emphasized the importance for administrators to recognize the potential disaster that might result from inattention to the mental health needs of staffs and organizations.

Burnout exists and its prevalence is being currently documented in the literature. Further research is necessary to document its incidence and impact upon a teacher's physical condition and the students' education. Exposing its causes, symptoms, and types of prevention is vital if it is to be eliminated among teachers at all levels (Weiskopf, 1980).

Prevalence of Anxiety, Stress, and Burnout Among Teachers

Since the early 1970's, there has been a great deal of concern in academia about the prevalence and potential detrimental effects of anxiety, stress, and burnout on those in the teaching profession (Belcastro & Gold, 1983). Historically, those involved in stress research have been concerned with the multiplicity of factors that have an impact upon students' health. This concern has recently turned to the effects of the teaching environment and how it impacts on the quality of

teachers' health. There is an increasingly large body of literature that suggests teachers are experiencing greater and more potent doses of work-related stress.

The incidence of various types of emotional maladjustment, particularly anxiety, among teachers has received considerable attention in the literature since early in this century (Coates & Thoresen, 1976). Hicks (1933), in a survey of 600 teachers, found that 17% described themselves as nervous and another 11% had suffered from nervous breakdowns. Randall (1951) reported that 10% of teacher absences of 10 days or more were reportedly due to nervous conditions such as fatigue, prolonged menstrual disorders, and situational reactions. Coates and Thoresen (1976) reported the following data based on their review of research conducted by the National Education Association:

1. In 1938, 37.5% of a nationwide sample of 5,150 teachers indicated they were seriously worried and nervous.
2. In 1951, 43% of a sample of 2,200 teachers reported that they were working under considerable strain and tension.
3. Of 2,290 teachers surveyed in 1967, 16% responded that they were working under considerable strain. Another 61.7% of the same sample reported that they working under moderate strain.

Reed (1979) reported on further findings of the National Education Association. In 1961, 23% of teachers had 20 or more years of experience. By 1976, this figure was down to 14%.

Many of the best and brightest teachers were found to be turning to jobs in industry instead of teaching. Muse (1980) found that one-third of today's teachers say that they would choose another career if given the opportunity. Four out of 10 said that they would leave teaching before retirement. He reported that in 1974, 23% of college students said that they wanted to teach after their graduation. This figure fell to 13% in 1979.

Recent research on the prevalence of anxiety and stress among educators included a study by Kyriacou and Sutcliffe (1979). They investigated the association between self-reported stress and three response correlates of teacher stress: job satisfaction, absenteeism, and intention to leave teaching. The study employed a questionnaire to survey a sample of 218 teachers in 16 medium-sized, mixed comprehensive schools in England. The results indicated that 20% of the teachers rated being a teacher as very or extremely stressful. Self-reported teacher stress was negatively associated with job satisfaction ($r = -.27$; $p < .01$), and positively associated with the intention to leave teaching ($r = .18$; $p < .01$). The association between self-reported teacher stress and frequency of absences failed to reach significance, but for total days absent, the association was significant and in the predicted direction ($\rho = .12$; $p < .05$).

In a sample which included 22% of teachers employed by the Chicago Board of Education, Cichon and Koff (1980) found that regardless of sex, race, age, type of school, or physical or mental illness, teachers share common perceptions about stress associated with teaching. Analysis of 36 rank-ordered events

revealed 4 general clusters of items which caused stress among those responding. The first involved "priority concerns," where the dominant themes were violence and student discipline. The second cluster revolved around the theme of "management tension," including events over which the teacher felt little control. "Doing a good job," the third cluster, involved being able to maintain self-control when faced with anxiety-provoking situations. The fourth cluster, "pedagogical functions," induced relatively little stress, due to the fact that teachers perceived these events as being under their immediate control.

A two-part descriptive study, completed by Dedrick, Hawkes, and Smith (1981) and Hawkes and Dedrick (1983), brought to light some unique data about teacher stress. The 1981 study surveyed K-12 faculties of a middle-sized midwestern community school system. The survey addressed itself to the stress of the profession as seen only by the teaching faculty; administrators, consultants, supervisors, and counselors were excluded from the sample. Almost 57% of the respondents indicated that they had thought seriously about a career change. Twenty percent of the respondents reported that they would actively discourage a student from entering the teaching profession. The follow-up study, completed in 1983, employed the same process. Teachers were surveyed at all grade levels from K-12 and in all subject fields. The population reflected a school size from the very small rural organization to the medium sized urban system. The results showed that 90% of the teachers surveyed reported prevalent job-related stress.

Anderson (1981) described the results of a study conducted by the American Academy of Family Physicians concerning living patterns which affect health and the development of methods of motivating people to make changes in these patterns. Six sample groups were chosen for the study, representing a spectrum of social, educational, and economic circumstances. Three of the groups consisted mainly of males: business executives, farmers, and family physicians. The other three groups, including garment workers, secretaries, and teachers, consisted mainly of females. Approximately 1,500 individuals in each group were surveyed; the return rate for teachers was 36%. The mean age of the teachers in this study was 41; mean income was \$26,000 a year; 66% of the sample were female; 82% were caucasian, 11% were black, 3% were Hispanic, and 3% were Asian or other; 67% were married; 92% had college or postgraduate degrees. Approximately 67% of the sample reported their work environment to be usually or always stressful, 20% tended to feel worried, and 50% indicated that they would choose another profession if they were to start their careers again. Among the total population sampled, garment workers and teachers liked their jobs least.

Feltler and Tokar (1982) collected data from more than 3,300 K-12 public school teachers throughout Ohio. Their questionnaire, "Diagnosing Personal Stress," was a single-page, 19-item checklist based on an instrument developed by Kyriacou and Sutcliffe (1979). Results of the study indicated that teachers perceived their jobs to be less stressful than was

anticipated by the researchers. Sixteen percent of the respondents reported that their job environments were either very stressful or extremely stressful; 76% rated their jobs as being moderately or mildly stressful; 7% indicated that their jobs were not stressful. Their data showed some evidence that the higher the grade level taught, the more stressful the job, with 19% of high school teachers reporting their job to be very or extremely stressful compared to 16% for junior high and 13% for elementary school teachers. Of those teachers employed in urban schools, 20% confirmed that their jobs were very stressful compared to 16% in suburban and only 14% in rural schools. Teachers in the 31-44 year age range reported higher levels of stress than either teachers under 30 or those 45 years or older. Only 16% of the first-year teachers surveyed reported their job to be very or extremely stressful. As a group, teachers within five years of retirement reported a large amount of variation in job-related stress. Eighteen percent indicated their jobs were very or extremely stressful, while 12% reported that teaching was not at all stressful. It was concluded by the researchers that stress may be a serious problem for teachers, but it appears to be a manageable one and not as severe as the literature has led professionals to believe.

Belcastro and Gold (1983) conducted a study designed to identify the relationship between reported levels of stress and somatic complaints and selected illnesses. The primary purposes of the study were to examine patterns of somatic complaints reported by teachers and to identify any that might have been

associated with the burnout syndrome. The Maslach Burnout Inventory and the Teacher Somatic Complaints and Illness Inventory were distributed to 428 teachers in public schools in Southern Illinois. More than 11% of those responding to the study were classified as burned out. In each case, the data indicated that the burnout group suffered somatic complaints at either a greater frequency, or with greater intensity, than did the group of teachers who were not burned out. It appears that somatic complaints are indeed significant discriminating variables between these two groups of teachers. The researchers concluded that burnout represents a health risk to teachers in this study and that much of the current concern is warranted, not only because of the numbers of teachers throughout the country who may be involved, but also because of the potential impact of burnout on those teachers' physiological and psychological well-being. It was suggested that teachers should be provided with information and skills which will be helpful in helping them to cope with occupational stress.

Milstein, Golaszewski, and Duquette (1984) presented data that established the level of respondent teachers' perceived stress. Urban elementary school teachers' responses, collected through the use of a survey, to the organizationally based stressors that can potentially lead to manifestations of stress were examined. The study was conducted in a large urban school system which serves almost 48,000 students and employs approximately 3,400 teachers. Respondents were asked to indicate how stressful they feel their jobs to be. Results

indicated that the mean response, on a five-point scale ranging from very little (1) to very much (5), was 3.35, with an across-school range of 3.20 to 3.26. The mean was above the midpoint on the scale, indicating that these urban elementary teachers did indeed feel the impact of stress. It was also noted that the general felt-stress question correlated at the .05 significance level with 29 of the 35 questions which tested for specific organizational stressors. Thus, respondents were able to translate their general perceived level of stress into stress emanating from organizationally based factors. However, urban elementary teachers surveyed reported only moderately high levels of stress. On the surface, this indicated that teachers may not be as stressed as is commonly believed. The researchers suggested that this may be due to the fact that teachers who are exposed to stressful environments for extended periods of time become more capable of coping, or they may become numbed to their environments.

From a major study funded by the Portland State University Research and Publications Committee and conducted in schools in Washington and Oregon, Falkenstein (1982) reported data that seem to contradict much of the current thinking about teachers' attitudes, motivation, and pessimism. The Portland study indicated that 98% of the teachers surveyed receive an average amount to a great deal of satisfaction from their work, with nearly 75% saying they would choose again to go into teaching. Only 1.6% said they were dissatisfied with their profession. The results of this study were interpreted by Falkenstein to

indicate that a very small number of teachers are suffering from excessive work-related stress, and that they are receiving undue attention at the expense of the great majority of teachers in this country. She concluded that inordinate concentration on burnout may in itself contribute to the syndrome by persuading contented teachers that they should be dissatisfied with their professional environment.

There is little question that teachers are facing serious difficulties in their jobs and that this is taking a toll on the quality of education in this country. Teachers are absent more often from their classrooms, are leaving teaching for other careers, and are opting, in many cases, for early retirement. There are predictions that by the middle 1980s the United States is likely to suffer from an overall shortage of qualified teachers (Bruner & Felder, 1983). Researchers are seeking answers to the persistent questions concerning the prevalence and causes of teacher stress and burnout. Earlier research tended to focus solely on teacher behaviors, but more recently, the context of the school environment is receiving special attention. Research efforts may well provide the information necessary for identifying sources of anxiety in order to facilitate interventions which will deal effectively with this growing problem of professional burnout.

Symptoms of Anxiety, Stress, and Burnout

Job-related stress is typically viewed as having adverse effects upon human services professionals, their clients, and the services that they render (Zabel & Zabel, 1983). Burnout is

not an instantaneous happening; rather, it is a condition which builds over a prolonged period of time, sometimes so slowly that teachers are unable to detect its occurrence. It is reasonable to assume that when people consistently report feelings of stress in their working lives, both their work and well being may be affected (Pratt, 1978).

Symptoms of stress are as unique to individuals as the stressors involved in their production. A teacher's symptoms of distress result from a combination of genetic predisposition, prior experiences, and learning (Sparks, 1983). Pratt (1978) encouraged the observation of physiological, psychological, and sociological referents in human services workers when looking for the effects of distress.

Sparks (1983) emphasized that a list of symptoms of teacher anxiety, stress, and burnout would be virtually endless. However, it would include common physiological complaints such as insomnia, headaches, lower back pain, hypertension, chronic fatigue, an upset stomach or ulcers, and colds or upper respiratory infections. He deemed it critical that teachers learn to identify their own characteristic symptoms at the earliest possible moment and to record the most prevalent symptoms in an accessible location in order to become aware of the warning signs.

Kaiser and Polczynski (1982) stated that the emotional aspects of excessive stress include anger, fear, and the onset of anxiety, which is fear in the absence of specific danger. They listed the following warning signs:

1. Inability to remain seated for long periods;
2. A sudden change in speech patterns;
3. A sudden increase in the number and seriousness of discipline problems in a teacher's classroom;
4. A sudden increase in fault-finding behavior and abruptness;
5. A sudden increase in the time necessary for task completion;
6. A sudden development of nervous mannerisms;
7. A sudden tendency to repeat unnecessarily;
8. An increase in the tendency to interrupt;
9. Sudden loss or gain in weight;
10. A tendency to withdraw into privacy and solitude;
11. An increase in alcohol consumption and/or drug use.

In a landmark study of the symptoms of teacher stress, Kyriacou and Sutcliffe (1978) indicated that exhaustion and frustration were the most common symptoms experienced. Youngs (1978) found that anxiety in teachers is usually associated with a variety of personal, social, and physical events from interpersonal experiences in the school setting. She identified incompatible relationships between supervisors and teachers as a major source of anxiety. Included in her list of symptoms were feelings of inferiority, uselessness, loneliness, betrayal, as well as lack of interest and loss of the desire to take risks.

From their study of Chicago school teachers, Cichon and Koff (1980) found that stress associated with teaching was playing an important role in the etiology of a number of

disorders suffered by teachers. They reported that more than half of the respondents stated that they experienced stress-related physical illness, and one-quarter reported stress-related mental problems. Emotional exhaustion, depersonalization, and reduced personal accomplishment have been emphasized as reactions to excessive stress (Iwanicki, 1983; Schwab, 1983). Emotional exhaustion is characterized by the depletion of a teacher's emotional resources. Depersonalization consists of developing negative, cynical, and callous attitudes toward students, parents, and colleagues. Reduced personal accomplishment is the feeling of no longer being effective in fulfilling school responsibilities.

Frey and Young (1983) described some behaviors to look for in teachers who are under excessive stress. They include (a) going through the motions of, but not enjoying, work; (b) becoming disappointed by a lack of professional or personal advancement; (c) not reading professional journals or taking advanced courses; (d) using old methods that are ineffective; (e) feeling negative toward self; and (f) demonstrating high absenteeism or tardiness.

Dissertation studies which examined symptoms of stress in educators found the following factors correlated positively with self-reported stress in teachers: absenteeism (Slick, 1974; Goodman, 1981); lack of job satisfaction (DiCaprio, 1974); frustration, exhaustion, headaches, irritability, anxiety, and diminished pleasure in teaching (Broiles, 1982). Examination of the symptoms of anxiety and stress is included in the following

researchers: Austin (1981), Bardo (1979), Bundy (1981), Cardinell (1981), Cook (1979), Goens and Knciejczyk (1981), Gupta (1981), Kyriacou and Sutcliffe (1979), and O'Brien (1981). It is the consensus of researchers active in the study of stress, that teachers become aware of the stressors which exist in their environments and that they develop strategies which will allow them to cope in a more effective manner.

Sources of Anxiety, Stress, and Burnout

Anxiety and stress can emanate from a variety of sources; a single culprit cannot be pinpointed as the unique cause of stress in all cases. Factors that cause anxiety and stress are generally termed stressors. A review of the literature reveals that these educational stressors have been identified in many research studies.

In Coates and Thoresen's (1976) landmark review of teacher anxiety, sources of anxiety during the beginning and later teaching phases are summarized. Sources of anxiety in beginning teachers were identified in the following studies: Ahlering (1963), Anderson (1968), Campbell and Williamson (1974), Dropkin and Taylor (1963), Fuller (1969), Fuller and Manning (1973), Gabriel (1957), Sorenson and Halpert (1968), Thompson (1963), Wey (1951), Yee (1968), and York (1968). Experienced teachers' reported sources of anxiety were revealed in the following research efforts: National Education Association (1939, 1951), Olander and Farrell (1970), and Fuller (1969).

More recent studies have classified teacher stressors under broad and inclusive categories. Results from a study of 124

primary teachers, conducted by Pratt (1978), showed that stress arose from five main areas: a general inability to cope with teaching problems; noncooperative children; aggressive children; concern for children's learning; and staff relationships. Among those teaching the more deprived child, stress increased with the age of children taught. Kyriacou and Sutcliffe (1978), in their analysis of the sources of teacher stress, revealed four factors which serve as stressors: pupil misbehavior, poor working conditions, time pressures, and poor school ethos.

Goens and Knciejczyk (1981) found that the causes of stress can come from external or internal sources. External factors that influence teachers' stress levels may include student behavior, community attitudes toward education, collective bargaining issues, layoffs, interpersonal relationships, job mobility, and the physical environment of the school. Internal stressors are associated with the individual's self-concept, expectations, and attitudes. Included in these internal stressors are discrepancies between a teacher's ideal performance level and the reality of his/her achievements, boredom, and failing to deal with feelings and emotions.

When classifying stressors, Gupta (1981) grouped factors that cause stress under three broad headings. Individual stressors stem from characteristics of the person experiencing the stress, and include family responsibility, personality, age, and years of teaching experience. Environmental stressors stem from conditions outside the work place, and include students, administrators, parents, and the community at large.

Organizational stressors stem from the conditions at the work place, and include the characteristics of the school itself, the job, and those who are employed in the school system.

Kaiser and Polczynski (1982) determined that the sources of excess stress affecting educators include factors intrinsic to their jobs, factors intrinsic to the organization within which they work, and factors within the educators themselves. They determined that the work place itself is the center of most stress-producing agents.

Iwanicki (1983) described three broad sources of distress affecting teachers. Societal sources of distress result from the pressure placed upon the schools by social and political forces within the community. Organizational sources of distress result from the failure of schools to organize properly to meet the demands of the public as well as the needs of teachers and students. Role-related distress is a function of the teacher's personality and preparation as it relates to one's job. Possible sources of role-related distress are classroom discipline problems, difficulty in developing appropriate instructional programs for children with special needs, and the failure to develop positive relationships with students, parents, peers, and administrators.

It is important to realize that what is stress producing for one individual may not be so for another. The nature of the subject taught, the teaching situation, and the grade or age level of students can cause varying degrees of stress in different teachers (Frey & Young, 1983). They identified and

discussed three major sources of teacher stress. Intrapersonal stressors include health, age, self-esteem, motivation, education, sex, and off-job tasks. Interpersonal stressors involve student interaction, peer relations, principal interaction, parent relationships, and custodial and secretarial relationships. Included in environmental sources of stress are overcrowded classrooms, lack of teaching supplies or materials, disruptive students, salary, extracurricular duties, and low staff morale. It was suggested that these three major categories of stress can interact with one another to produce burnout in educators.

The following studies have pinpointed other specific stressors in education: increase in responsibilities assigned to a teacher (Anderson, 1981; Youngs, 1978); lack of administrative leadership and concern (Cook, 1979); little or no opportunity for personal interaction among peers (Cook, 1979); lack of opportunity for teacher input into the decision-making process (Cook, 1979); need for professional growth (Cook, 1979); lack of mobility within the profession (Austin, 1981; Reed, 1979); assaults by the media (Reed, 1979); budget and salary problems (Anderson, 1981; Bardo, 1979; Reed, 1979); dealing with reluctant learners and disruptive students (Bardo, 1979; Broiles, 1982; Dedrick, Hawkes, & Smith, 1981; Hawkes & Dedrick, 1983; Mead, 1980); teaching handicapped children (Beck & Bargino, 1983; Weiskopf, 1980); work overload (Flint, 1982; Weiskopf, 1980); increased child-staff ratio (Weiskopf, 1980); lack of program structure (Weiskopf, 1980); constant

expectations to be responsible for others (Weiskopf, 1980); threats of violence (Head, 1980); difficulty dealing with increased government regulations (Austin, 1981); resource shortages (Austin, 1981); age of teacher (Cardinell, 1981; Colasurdo, 1981; Schwab, 1983; Slan, 1981; Turner, 1982; Zabel & Zabel, 1983); lack of motivation (Cardinell, 1981); time of year (Hembling & Gilliland, 1981); lack of appreciation and/or approval by peers, supervisors, and the general public (Anderson, 1981; Chapman, 1983); poor physical and/or psychological work climate (Broiles, 1982; DiCaprio, 1974; Fielding, 1982; Flint, 1982; Nagy, 1983; Slick, 1974)); role conflict (Cooke & Rousseau, 1984; Milstein, Golaszewski, & Duquette, 1984; Schwab & Iwanicki, 1982); role ambiguity (Schwab & Iwanicki, 1982); sex of teacher (Schwab, 1983); grade level taught (Schwab, 1983; St. Clair, 1981); number of years of teaching experience (Slan, 1981; St. Clair, 1981; Zabel & Zabel, 1983); lack of time (Broiles, 1982; Creekmore, 1982; Dedrick, Hawkes, & Smith, 1981; Hawkes & Dedrick, 1983); role underload (Gupta, 1981); and race of students (Goodman, 1981). These explicit sources of stress are firmly documented and researchers are attempting to further analyze and categorize new and important causes of stress and anxiety in teaching professionals.

Early research in the area of teacher stress tended to focus on interpersonal teacher stressors. More recently the context of the school environment has received special attention (Bruner & Felder, 1983; Milstein, Golaszewski, & Duquette,

1984). Because one of the most meaningful elements in one's environment is the place in which one works, it would follow that attempts to manage stress should include the work setting as a focal point of diagnosis and remediation efforts. If a distressful work environment can be modified, it may be that fewer teachers will exhibit anxiety and stress.

Bruner and Felder (1983) completed a study that examined the perceptions of teachers about the difficulties they face in their schools. Paramount among the perceived problems was a series of variables related to organizational efficiency. Out of 60 variables ranked in the study, the 19 highest-ranked variables clustered around two dominant themes; administrative inefficiency and classroom management problems. Fifteen of the remaining highest-ranked variables could be associated with the management of schools. These teachers were also bothered by inadequate physical conditions or malfunctioning equipment.

In their analysis of organizationally based stress, Milstein, Golaszewski, and Duquette (1984) identified stressors from five environmental categories that exist within schools. These categories are summarized as follows:

1. Relationships at Work--the extent and tenor of adult interactions on the job. Included are interactions with superiors, peers, and subordinates. There is a direct relationship between the trust demonstrated in the relationships among organization members and members' feelings of job satisfaction and well-being.
2. Organizational Structure and Climate--stress-related issues in this category include the extent to which members participate in decision making; whether members have a sense of belonging; whether supervision is supportive and effective; whether there is clear and sufficient communication; and whether limitations are placed on the behavior of organization members.

3. Factors Intrinsic to the Job-these include the extent, type, and pace of work; the physical effort required, the total number of hours involved and the specific hours of the day or night spent at the work place; the extent to which activities are routinized and repetitive; and physical environment factors, such as space, lighting, noise levels, and availability of private space.
4. Role in the Organization-several role-related factors can be stress-inducing; role ambiguity (i.e., confusion about the scope or specific responsibilities of the job); role conflict (i.e., being pulled in different directions by incompatible demands); roles which are high in responsibility for people; and the perception of minimal authority in one's organizational role.
5. Career Development-career progression, including status, and opportunity for advancement is important to organization members. Lack of job security and perceived low probability of reward can lead to manifestations of stress. (pp. 293-294)

Respondents, selected from four elementary schools in a large urban school system, were able to translate their general perceived level of stress into stress emanating from organizationally based factors. The following indicates how these five factors were ranked, from highest to lowest, as stressors: career development; organizational structure and climate; relationships at work; factors intrinsic to the job; and role in the organization. These findings support the contention that organizational leaders can design better stress management programs if they view the work site, as well as the worker, as a potential source of stress.

Work-related stress can be reduced through staff development programs for educators. Appropriate organizational development programs have also been shown to be effective (O'Brien, 1981). Solving work-related stress problems requires not only an investigation of the factors which tend to promote

it, but also a close examination of interventions which will reduce stress within schools.

Stress Management Interventions

A multitude of techniques used to reduce interpersonal, intrapersonal, and environmental stress have been mentioned in the literature. Effective management of anxiety and stress can play a vital part in reducing the number of educators suffering from the malady of burnout. Unless teachers, as individuals, and faculties, as groups, look carefully at interventions and select those which will be appropriate to solve the problems at hand, no lasting purpose will be served by the infinite number of articles and books written on this topic (Sparks, 1983).

Pearlin and Schooler (1978) suggested three general categories of stress management activities: (a) responses that control the physiological or emotional consequences of distress, such as exercise and relaxation; (b) responses that control the meaning of the distressful experience, such as cognitive behavior modification; and (c) responses that change the situation out of which the distress arises, such as staff development programs, professional support groups, or organizational change strategies. Although there are a variety of methods available for reducing both personal and organizational stress, this review will concentrate on those interventions which are organizationally based and appropriate for use within the school setting.

Organizational change is, at best, a difficult and long-term task (Sparks, 1983). However, many job-related

stressors can be remedied or alleviated through creative approaches and collective action. Research on organizations and innovative management practices in business and industry have provided direction for educators (Ouchi, 1981; O'Hanlon, 1983; Sparks, 1983). For example, O'Hanlon (1983), in his comparison of Japanese organizations and American schools, concluded that successful management of an American school, like the operation of a Japanese industry, involves long-term development of personnel, trust between workers and management, participative decision making, and the development of a shared philosophy. He concluded that moving to a truly participative approach would be a major change for American schools. Increased effectiveness can be brought about by capturing the emotional and mental energy of teachers in analyzing, planning, and decision-making functions within the school. In his Theory Z approach to management, Ouchi (1981) illustrated the importance of high quality communication, participative decision making, and respect for the individual worker. Sparks (1983) suggested that school systems study these programs for transferable strategies that will improve morale, increase job satisfaction, solve instructional problems at the building and classroom level, and have a positive effect on student performance.

Professional Support Groups

In his discussion of mutually supportive relationships, Rogers (1977) stated the following:

A new approach to education demands new ways of being and new methods of handling problems. Individuals are also finding that if they carry out a quiet revolution in the schools, they definitely need a support group.

This can be small, perhaps only two or three people, but a resource of persons where one does not need to defend one's point of view, and can freely discuss the successes and failures, the problems faced, the difficulties unresolved. (p. 80)

While mutually supportive relationships may occur spontaneously, they are much too important as a stress management strategy to be left solely to chance (Sparks, 1983). School administrators can encourage teachers to develop a support network within the school where they can share problems and solutions (Frey & Young, 1983). Professional support groups reduce isolation and highlight the vast amount of knowledge and skills teachers can bring to mutual problem-solving situations.

Frey and Young (1983) stated that administrators should encourage staff members to develop cooperative working relationships with one another. This team-building approach becomes the basic building block of organizational development. Personal interaction greatly influences teacher morale; if this component is neglected or absent within a school, staff morale will undoubtedly be adversely affected (Cook, 1979). It would appear that the public schools and their administrative staffs have a responsibility to encourage and assist in the formation of support groups (Austin, 1981; Beck & Gargiulo, 1983; Cook, 1979; Frey & Young, 1983; Goens & Knciejczyk, 1981; O'Brien, 1981; Sparks, 1983; Wangberg, 1982; Weiskopf, 1980; Youngs, 1978).

Staff Development Programs

A well-designed, comprehensive staff development program is likely to be one of the most efficient means through which teachers can systematically acquire understandings and competencies necessary to face problems within the school setting (Sparks, 1983). Teachers and administrators are likely to benefit from programs in communication skills, participative decision making, and research-into-practice approaches to school climate improvement (Cook, 1979; Conners, 1983; Fox et al, 1974; Frey & Young, 1983; Iwanicki, 1983; Masinton, Smith, & Solomon, 1981; O'Brien, 1981; Sparks, 1983; Sylwester, 1983; Wangberg, 1982).

The school functions as a stress-reduction agency when it creates an environment that allows a staff to identify sources of organizational distress in their setting. Wangberg (1982) commented that designs for professional growth should include respect for teacher competence and willingness to make changes, identification and pursuit of an area for growth, administrative and peer support, and a practical, on-the-job emphasis.

Conners (1983) suggested that it is the function of the school to provide a climate which is primarily conducive to both teaching and learning on the part of the staff as well as the students. Investigation of the school climate can serve as an effective in-service project for school faculties in their look at organizational stressors and how to cope with them (Fox et al, 1974). They further stated the following:

A positive school climate is both a means and an end. A good climate makes it possible to work productively toward important goals, such as academic learning, social development, and curriculum improvement.

It also makes school a good place to be, a satisfying and meaningful situation in which both adults and youth care to spend a substantial portion of their time. (p. 1)

Iwanicki (1983) listed ten characteristics of a healthy school organization. Included in that list are: (a) goal focus, (b) communication adequacy, (c) optimal power equalization, (d) resource utilization, (e) cohesiveness, (f) morale, (g) innovativeness, (h) autonomy, (i) adaptation, and (j) problem-solving adequacy. Through a review of these 10 characteristics, a school staff can identify sources of organization distress in their setting. Then, they may develop appropriate strategies for dealing with problems identified in any of the areas. Organizational development efforts in these areas can improve the health and productivity of a school staff by reducing or alleviating the sources of distress affecting them.

An investigation of school climate can provide teachers an opportunity to take a positive look at their organization in order to identify areas of strength as well as weakness. When teachers give and receive genuine, positive feedback, they feel better about themselves, know where they stand, and have less stress on the job (Frey & Young, 1983). They also suggested that teachers develop a sense of importance and inclusion in the school when performance goals for individuals and the organization are clearly communicated.

Emergence of school climate awareness is well-documented by Fox (1974). The authors concur that a school can provide a productive learning environment as well as a pleasant and satisfying school situation within which teachers and students can live and work. The primary focus of their School Climate Improvement plan is on the young people for whom the school exists. A corollary is the provision of an productive environment for the staff and other adults who work within the school community. A school mini-audit can be a tool for focusing on the positive elements of the school environment which include evidence of respect, trust, high morale, opportunities for input, continuous academic and social growth, cohesiveness, caring, and school renewal. If the school is to be a successful, productive, and satisfying institution basic human needs must be met, including physiological, safety, acceptance, and recognition needs. A school climate mini-audit focuses on three major determinant areas which include program determinants, process determinants, and material determinants.

Program determinants of a positive school climate includes: (a) opportunities for active learning, (b) reasonable individualized performance expectations, (c) varied learning environments, (d) flexible curriculum and extracurricular activities, (e) appropriate support and structure, (f) cooperatively determined rules, and (g) varied reward systems. Process determinants of a positive school climate includes: (a) improvement of school goals, (b) identification and attempts to resolve conflicts, (c) effective communications, (d) involvement by staff as well as

students in the decision making process, (e) autonomy with accountability, (f) use of effective teaching-learning strategies, and (g) use of effective long- and short-range planning techniques. Material determinants of a positive school climate include: (a) adequate resources, (b) a supportive and efficient logistical system, and (c) a suitable school plant (Fox et al., 1974). The authors state that a school climate which does not succeed in creating the determinants listed above may produce such problems as high student and teacher absenteeism, faculty cliques, low staff morale, faculty apathy, and a poor image of the school held by the staff. They concluded that these kinds of problems demand direct attention in order to establish the kind of school climate which is conducive to high morale and greater productivity among teachers and students.

O'Brien (1981) concluded that the formation of steering committees can insure that goals and objectives for a positive school climate are continually monitored and implemented. Fox (et al., 1974) also recommended the establishment of ongoing committees to work with the staff and administration to meet the needs of the school. Realistic long-term goals that require hard work and the use of faculty potential can provide a focus and motivation for teachers' ongoing personal and professional renewal (Sparks, 1983).

Implications for Interventions

Although many suggested techniques for reducing teacher stress appear in the literature, very few have been empirically tested. Newman and Beehr (1979), in their extensive review of ways to handle job stress, concluded that strategies for managing work-related stress do exist but that their effectiveness has not been evaluated. Although some of the strategies seem to show face validity, until empirical validation occurs, practitioners have little more than their common sense to rely on as they attempt to develop badly needed preventive and curative stress management programs.

Evaluation of programs designed to alleviate stress is an issue which must be addressed by those involved in developing such stress management interventions. Schwab and Iwanicki (1982) suggested that empirical data be collected when examining such variables as leadership style, school climate, and teacher personality characteristics as they relate to the reduction of stress and anxiety. The effects of interventions should be tested in order to assure that ineffectual programs will not be continued.

Schwab (1983) concluded that future large scale studies need to continue to examine the relationships between organizational structures and aspects of burnout. Smaller scale, more intensive studies can begin to uncover the causal factors affecting stress at the school level. Then intervention programs can be designed, implemented, and evaluated.

Summary

The changing nature and ever-increasing complexity of the teaching process has brought about an increase in the prevalence of anxiety, stress, and burnout encountered by those who are active in the teaching profession. Research relevant to these topics is well-documented in the current literature. Over the past decade, much attention has been paid to the prevalence, symptoms, and sources of anxiety, stress, and burnout as it applies to educators. A multitude of suggestions for appropriate interventions which will decrease anxiety and stress levels, thus preventing burnout, are available. However, little empirical evidence concerning the effectiveness of these procedures is documented. There is a justifiable need for further research that will document which preventive techniques and/or interventions facilitate the decrease of anxiety and stress in school personnel.

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